Sound Management of Pesticides and Diagnosis and Treatment of Pesticide Poisoning

USER'S MANUAL

Contents of the User's Manual

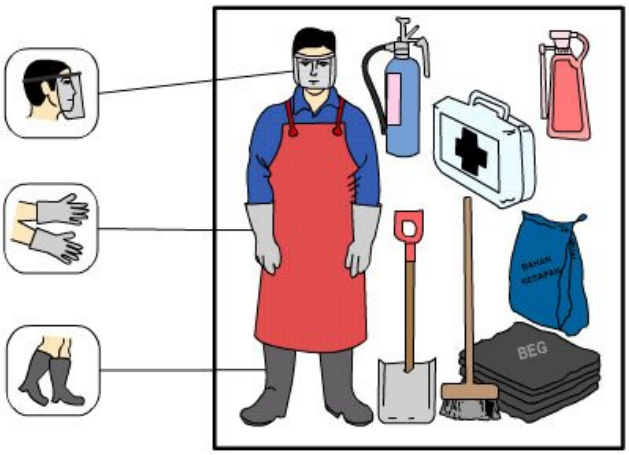
- Objectives of the resource tool
- Computer system requirements
- How to start
- Contents of the Resource Tool
- Modules, subjects and sections - How to use the Resource Tool
- Where to find what information
- Target groups and training levels
- How to design and customize a training programme for a particular target group
- Preparing PowerPoint presentations
- Explanations on some of the functionalities of the resource tool, and problem solving
- How to order copies of the CD and the user's manual
- Feed-back
- Annexes: Examples of training programmes; trainer's "roadmap"; Subject Index

Objectives of the Resource Tool

This Resource Tool contains information on pesticides and their mode of action, personal protection measures as well as measures to protect the general public and the environment. The tool contains information on different aspects of pesticide management, in particular its judicious and safe application within the context of Integrated Pest and Vector Management.

The tool also provides information on diagnosis, first aid and treatment of pesticide poisonings.

The Resource Tool is intended for use in national programmes to assist in management of pesticides, and provide aid in diagnosis and treatment of pesticide poisoning, for use in formulating training courses, and may be adapted to the specific needs of different target groups.



Computer System Requirements

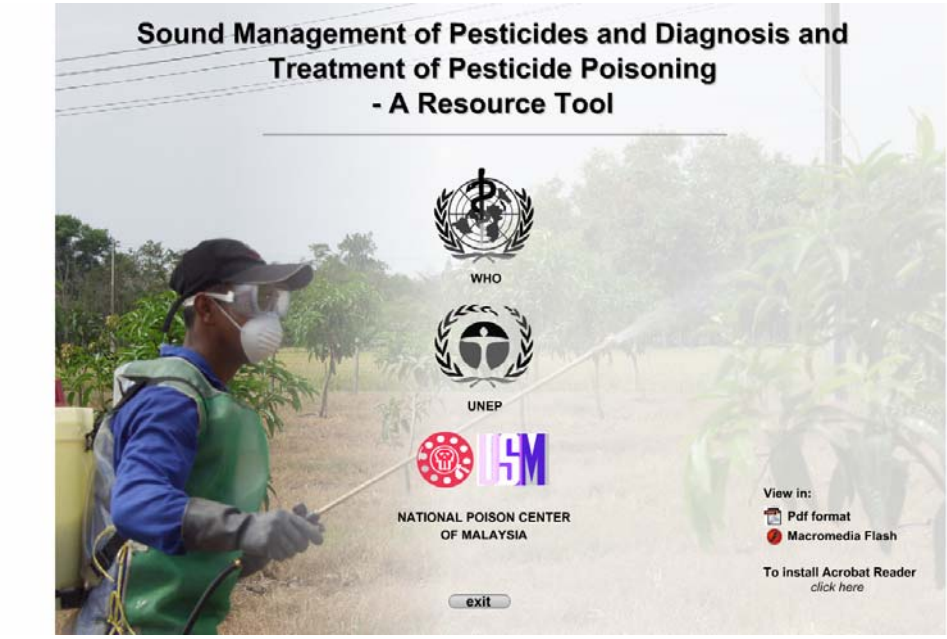
To run the Compact Disc the following (minimum) computer system requirements are recommended:

- Microsoft Windows 98 or later
- 128 megabyte Random Access Memory (RAM)
- Quad speed (4X) CD-ROM drive
- Internet Explorer 5 or later

This CD is optimised to run under Windows 98/ME/NT/2000/XP/Vista using Macromedia Flash. For the reading materials included, you need Flip Viewer 2.2 or greater (from FlipViewer.com) and Acrobat Reader 5 or greater (from Adobe.com) to view them. Flip Viewer and Acrobat Reader can be installed either by downloading from the Internet at http://www.flipviewer.com/ and http://www.adobe.com/, or running the Set-up program from the CD-ROM.

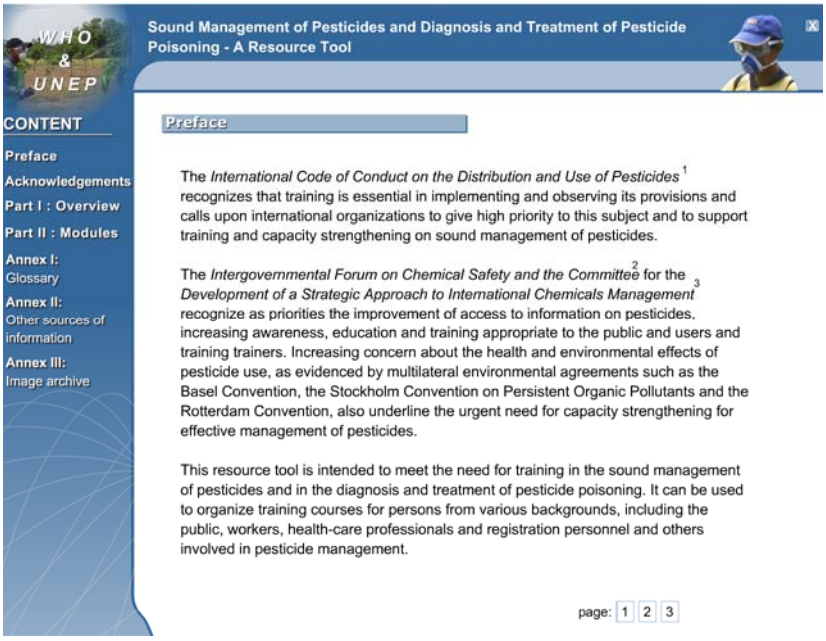
How to Start - Contents of the Compact Disc

1. Insert the CD-ROM.
2. The screen shown in Figure 1 should open automatically. If it does not:
3. Double-click the My Computer icon on your Windows desktop.
4. Go to the CD and double-click on the *Main.exe* file.
5. The screen should now look like Picture 1 below.
6. The resource tool will now be ready for use.



Picture 1- Entrance to the resource tool

Select and click on either Macromedia Flash for interactive mode or the pdf format. If you select Macromedia Flash you will now arrive at the Preface section with Contents in the sidebar. From here you can go to any other section of the resource tool.


WHO & UNEP
Sound Management of Pesticides and Diagnosis and Treatment of Pesticide Poisoning - A Resource Tool
CONTENT
Preface
Acknowledgements
Part I : Overview
Part II : Modules
Annex I: Glossary
Annex II: Other sources of information
Annex III: Image archive
Preface
The International Code of Conduct on the Distribution and Use of Pesticides[1] recognizes that training is essential in implementing and observing its provisions and calls upon international organizations to give high priority to this subject and to support training and capacity strengthening on sound management of pesticides.
The Intergovernmental Forum on Chemical Safety and the Committee[2] for the Development of a Strategic Approach to International Chemicals Management[3] recognize as priorities the improvement of access to information on pesticides, increasing awareness, education and training appropriate to the public and users and training trainers. Increasing concern about the health and environmental effects of pesticide use, as evidenced by multilateral environmental agreements such as the Basel Convention, the Stockholm Convention on Persistent Organic Pollutants and the Rotterdam Convention, also underline the urgent need for capacity strengthening for effective management of pesticides.
This resource tool is intended to meet the need for training in the sound management of pesticides and in the diagnosis and treatment of pesticide poisoning. It can be used to organize training courses for persons from various backgrounds, including the public, workers, health-care professionals and registration personnel and others involved in pesticide management.
page: 1 2 3

Picture 2 – Contents and Preface (page 1 of 3)

Contents of the Resource Tool

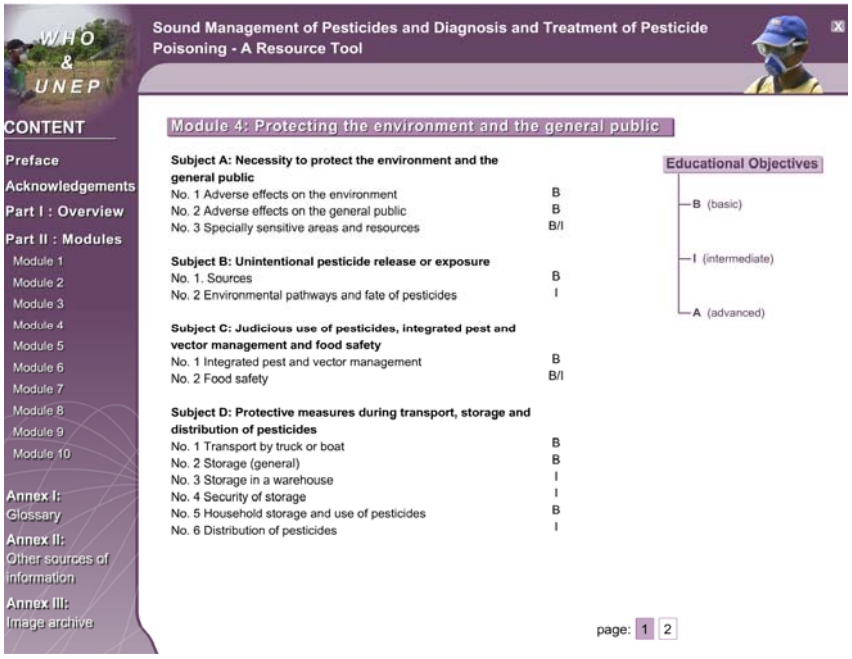
The Resource tool comprises two main parts and Annexes:

Preface
Acknowledgements
Part I: Overview, which contains 4 subtitles:

- Introduction
- Overview of the resource tool: Module description, Training levels (explained below), Visual aids, and Information sources
- Using the resource tool: Introduction, Training trainers, Trainers
- Index of subjects covered by modules

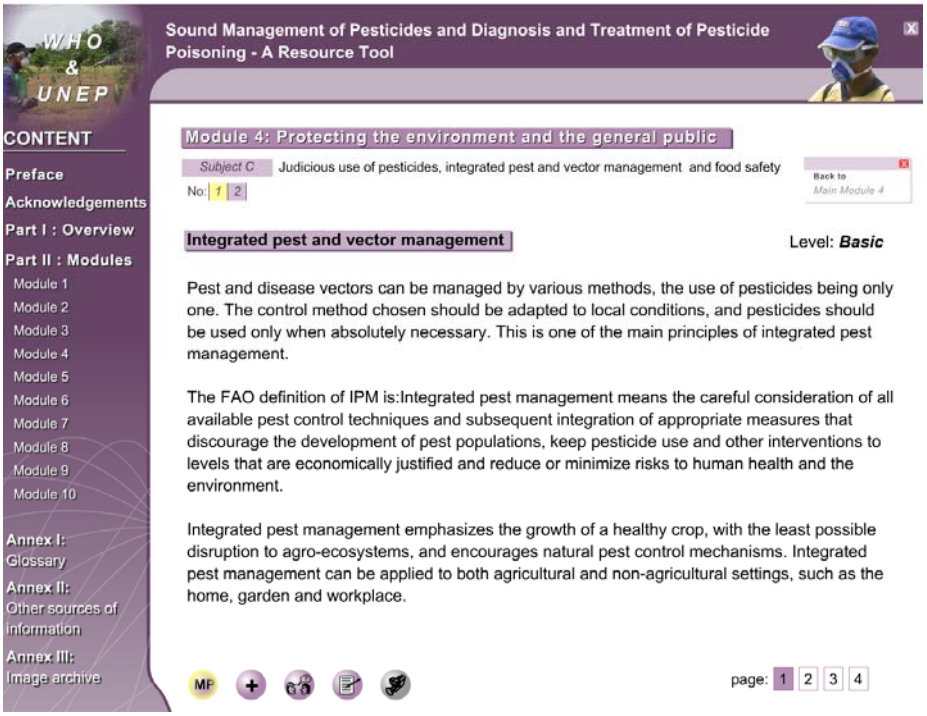
Part II: The Modules contains the following ten modules:

1. General considerations
2. Absorption and effects of pesticides
3. Personal protection
4. Protecting the environment and the general public (see Picture 6)
5. Chemical groups and modes of action of pesticides
6. First aid for pesticide poisoning
7. Medical treatment of pesticide poisoning
8. Administrative work and scientific subjects
9. Course evaluation methodology
10. Documentation (The pesticides CD-ROM)


WHO & UNEP
Sound Management of Pesticides and Diagnosis and Treatment of Pesticide Poisoning - A Resource Tool
CONTENT
Preface
Acknowledgements
Part I : Overview
Part II : Modules
Module 1
Module 2
Module 3
Module 4
Module 5
Module 6
Module 7
Module 8
Module 9
Module 10
Annex I: Glossary
Annex II: Other sources of information
Annex III: Image archive
Module 4: Protecting the environment and the general public
Subject A: Necessity to protect the environment and the general public
No. 1 Adverse effects on the environment B
No. 2 Adverse effects on the general public B
No. 3 Specially sensitive areas and resources B/I
Subject B: Unintentional pesticide release or exposure
No. 1. Sources B
No. 2 Environmental pathways and fate of pesticides I
Subject C: Judicious use of pesticides, integrated pest and vector management and food safety
No. 1 Integrated pest and vector management B
No. 2 Food safety B/I
Subject D: Protective measures during transport, storage and distribution of pesticides
No. 1 Transport by truck or boat B
No. 2 Storage (general) B
No. 3 Storage in a warehouse I
No. 4 Security of storage I
No. 5 Household storage and use of pesticides B
No. 6 Distribution of pesticides I
Educational Objectives
B (basic)
I (intermediate)
A (advanced)
page: 1 2

Picture 3 – Module 4: Protecting the environment and the general public (page 1 of 2)

Picture 3 shows the contents seen when clicking on Module 4 in Part II. This Module has six Subjects, A-F (click on the page 2 button to find out about Subjects E and F). To continue, select Subject C.

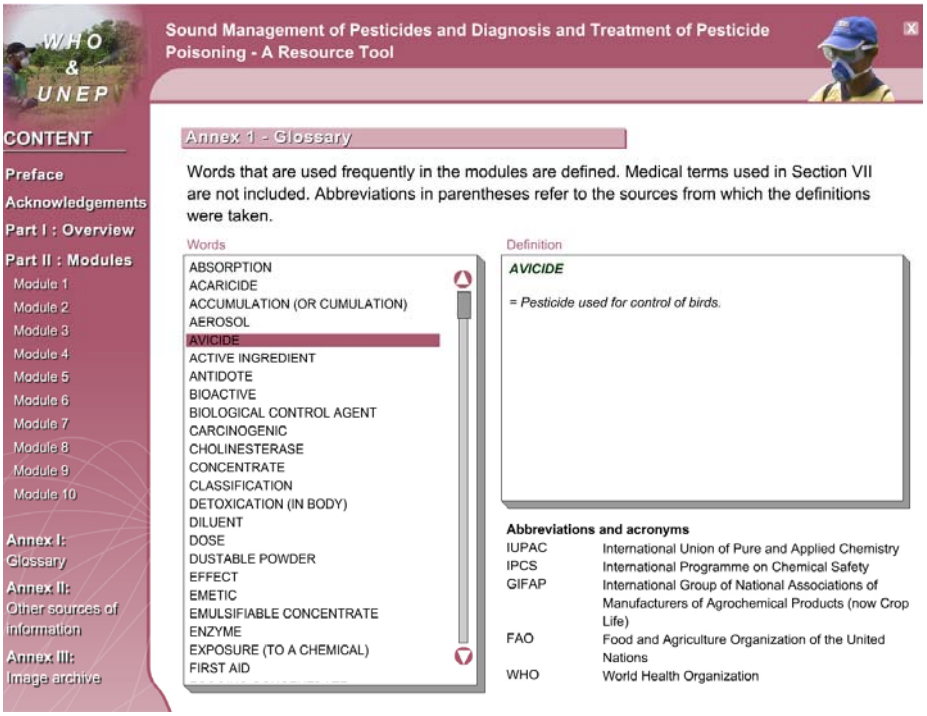

WHO & UNEP
Sound Management of Pesticides and Diagnosis and Treatment of Pesticide Poisoning - A Resource Tool
CONTENT
Preface
Acknowledgements
Part I : Overview
Part II : Modules
Module 1
Module 2
Module 3
Module 4
Module 5
Module 6
Module 7
Module 8
Module 9
Module 10
Annex I: Glossary
Annex II: Other sources of information
Annex III: Image archive
Module 4: Protecting the environment and the general public
Subject C
Judicious use of pesticides, integrated pest and vector management and food safety
No: 1 2
Back to Main Module 4
Integrated pest and vector management
Level: Basic
Pest and disease vectors can be managed by various methods, the use of pesticides being only one. The control method chosen should be adapted to local conditions, and pesticides should be used only when absolutely necessary. This is one of the main principles of integrated pest management.
The FAO definition of IPM is:Integrated pest management means the careful consideration of all available pest control techniques and subsequent integration of appropriate measures that discourage the development of pest populations, keep pesticide use and other interventions to levels that are economically justified and reduce or minimize risks to human health and the environment.
Integrated pest management emphasizes the growth of a healthy crop, with the least possible disruption to agro-ecosystems, and encourages natural pest control mechanisms. Integrated pest management can be applied to both agricultural and non-agricultural settings, such as the home, garden and workplace.
MP
page: 1 2 3 4

Picture 4 – Integrated pest and vector management, Subject C of Module 4 (page 1 of 4)

Picture 4 shows Subject C of Module 4: Integrated pest and vector management. Educational objectives for each training level will be found at the right hand side of the screen. Select and click to learn more. The text on the screen constitutes a part of the Main Points of Subject C. Click on page buttons at the bottom right of the screen to continue to pages 2, 3 and 4. Buttons at the bottom left of the page allow you to switch to Subsidiary points (plus sign), Discussion points (people symbol) or Training notes (note pad). Some Subjects may have a video clip (video camera). Click on the 'MP' button to return to the Main Points

Annex I: Glossary

Annex I contains a *Glossary* of words frequently used in the modules. An excerpt is shown in Picture 5.



Picture 5 – Appendix I - Glossary

Annex II: Other sources of information, which contains:

- Preventing Health Risk From the Use of Pesticides in Agriculture
- Instruction for Treatment and Use of Insecticide-treated Mosquito Nets
- International Code of Conduct on the Distribution and Use of Pesticides
- The WHO Recommended Classification of Pesticides by Hazard
- Pesticide Training Tool Kit - A guide for community workers
- Management of Poisoning - A handbook for health care workers
- PowerPoint Presentation Templates
- Links to other sites

Annex III: Image archive, which contains

- Images
- FAO/GIFAP/CropLife Pictograms
- GHS Pictograms
- Videos

Annex 7 of this User's Manual contains an index of where to find information within the resource tool. Within the tool, Part I: Overview, Section 4 also contains an index of subjects.

Modules, Subjects and Sections – How to Use the Resource Tool

Under each Module in Part II there are Subjects (alphabetical) and Sections (numerical). **Annex 4** of this User's Manual shows an example of a 1-week training programme for spray men in agriculture and their supervisors, jointly or separately. The first day of this programme will cover a total of nine training Sections (1A1, 1A6, 1B3, 1C1, 2A1, 2A2, 2A3, 2A4 and 2B1).

With the help of an appropriate projector (beamer), the entire contents of the Resource Tool can be projected on a white screen. In this case, the Trainer must be well prepared to avoid losing time while searching for sections to follow in his presentations. Annex 6 gives an example of how to prepare a *roadmap* for a training session on chemical groups of pesticides, their mode of action, first aid and medical treatment of poisonings. The relevant sections belong to either the Intermediate or the Advanced level of training. However, a Trainer may want to or may have to go from one Module to another during a particular training session. A roadmap of this kind will facilitate the navigation between modules and sections.

Target Groups and Training Levels

The toolbox has been created for a wide range of training needs including pesticide users, policy makers, regulators, distributors, non-governmental organizations, educators, health care providers and the general public. *The primary users of the toolbox however, are designated trainers set out to train others.*

The contents of each *Module* are presented at three levels to allow trainers to design courses suitable for target groups with different educational background and training needs:

- **Basic**: Covers fundamental issues such as personal protection and general information on risks of exposure and environmental contamination.

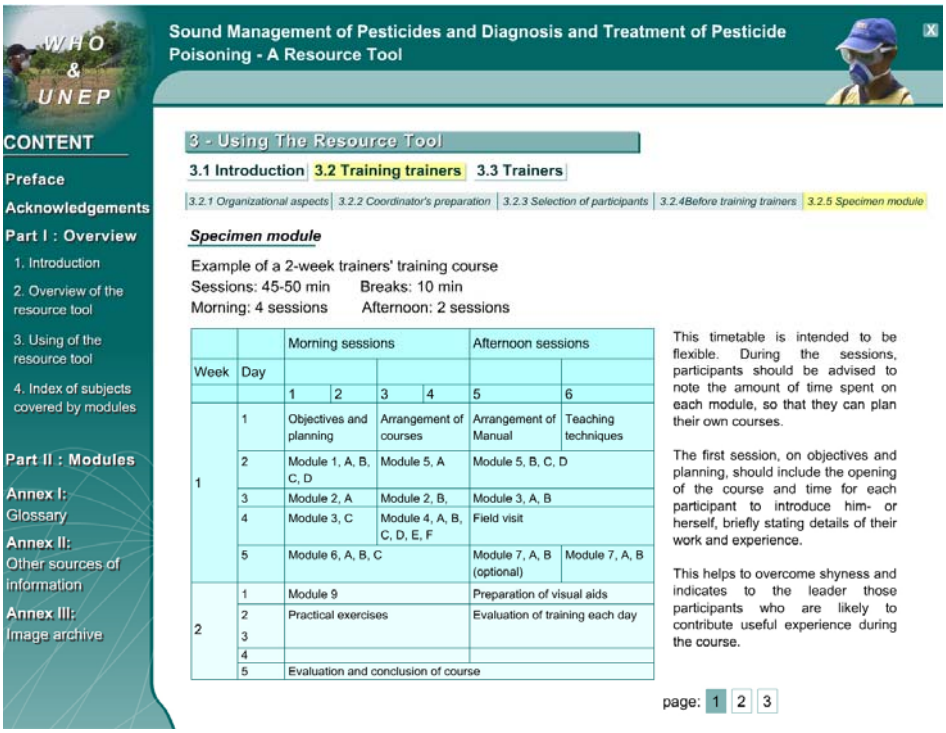
- **Intermediate**: More detailed, for participants with supervisory or operational responsibilities, who may work with more hazardous compounds and need a better understanding of preventive measures

- **Advanced**: For participants engaged in the regulation and control of pesticides and management of poisonings

The Resource Tool contains a total of over 220 sections of which approximately 60 are of the category *Basic*, 100 *Intermediate* and 60 *Advanced*. The emphasis throughout should be the relevance of the material to the group being trained. The participants should have some characteristics in common, such as occupation or interest, and should have a similar educational background. The following sections show examples of target groups in public health and agriculture. The latter case, in turn, illustrates an option for a joint training session with two different but related target groups at two different levels (Basic and Intermediate).

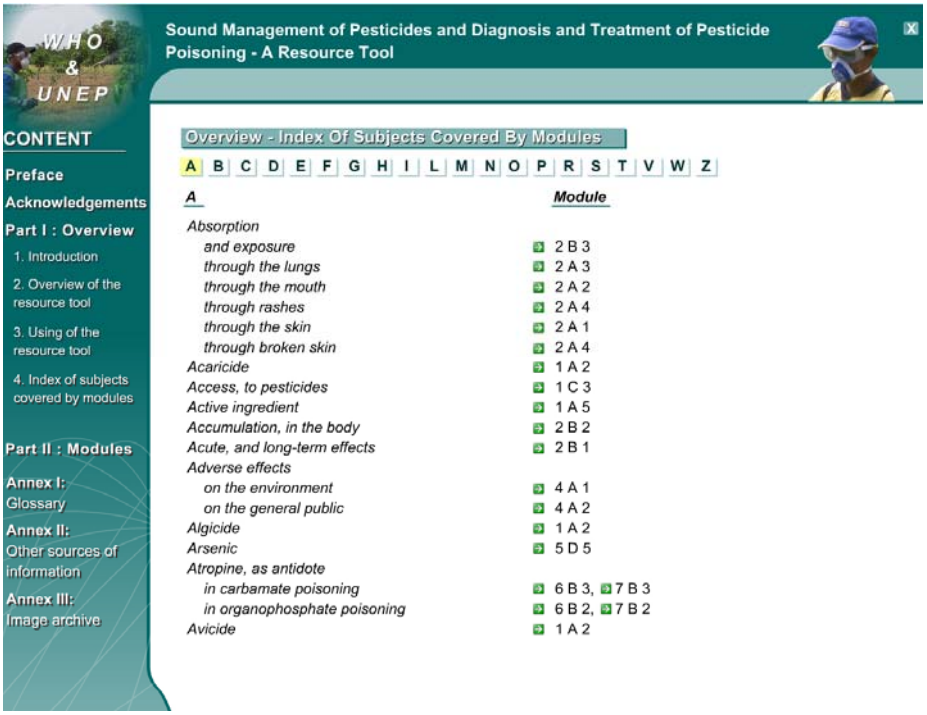
How to Design and Customize a Training Programme for a Particular Target Group

Part I "Overview of the Resource Tool" contains a section (No 3) on how to use the tool. In Section 3.2.5 (page 19 of the pdf version) a *Specimen module* assists the Trainer in the overall design of a training course. The same section gives suggestions on modules that could be used to train a number of *specific target groups* (detailed on page 3 of the Section).


WHO & UNEP
Sound Management of Pesticides and Diagnosis and Treatment of Pesticide Poisoning - A Resource Tool
CONTENT
Preface
Acknowledgements
Part I : Overview
1. Introduction
2. Overview of the resource tool
3. Using of the resource tool
4. Index of subjects covered by modules
Part II : Modules
Annex I: Glossary
Annex II: Other sources of information
Annex III: Image archive
3 - Using The Resource Tool
3.1 Introduction
3.2 Training trainers
3.3 Trainers
3.2.1 Organizational aspects
3.2.2 Coordinator's preparation
3.2.3 Selection of participants
3.2.4Before training trainers
3.2.5 Specimen module
Specimen module
Example of a 2-week trainers' training course
Sessions: 45-50 min
Breaks: 10 min
Morning: 4 sessions
Afternoon: 2 sessions
Morning sessions
Afternoon sessions
Week
Day
1
2
3
4
5
6
Objectives and planning
Arrangement of courses
Arrangement of Manual
Teaching techniques
Module 1, A, B, C, D
Module 5, A
Module 5, B, C, D
Module 2, A
Module 2, B,
Module 3, A, B
Module 3, C
Module 4, A, B, C, D, E, F
Field visit
Module 6, A, B, C
Module 7, A, B (optional)
Module 7, A, B
Module 9
Preparation of visual aids
Practical exercises
Evaluation of training each day
Evaluation and conclusion of course
This timetable is intended to be flexible. During the sessions, participants should be advised to note the amount of time spent on each module, so that they can plan their own courses.
The first session, on objectives and planning, should include the opening of the course and time for each participant to introduce him- or herself, briefly stating details of their work and experience.
This helps to overcome shyness and indicates to the leader those participants who are likely to contribute useful experience during the course.
page: 1 2 3

Picture 6 – Training trainers - Example module

An *Index of subjects covered by modules* (page 25 ff. in the pdf version) will assist the Trainer in the detailed design of the course (see Picture 7).


WHO & UNEP
Sound Management of Pesticides and Diagnosis and Treatment of Pesticide Poisoning - A Resource Tool
CONTENT
Preface
Acknowledgements
Part I : Overview
1. Introduction
2. Overview of the resource tool
3. Using of the resource tool
4. Index of subjects covered by modules
Part II : Modules
Annex I: Glossary
Annex II: Other sources of information
Annex III: Image archive
Overview - Index Of Subjects Covered By Modules
A B C D E F G H I L M N O P R S T V W Z
A
Module
Absorption
and exposure 2 B 3
through the lungs 2 A 3
through the mouth 2 A 2
through rashes 2 A 4
through the skin 2 A 1
through broken skin 2 A 4
Acaricide 1 A 2
Access, to pesticides 1 C 3
Active ingredient 1 A 5
Accumulation, in the body 2 B 2
Acute, and long-term effects 2 B 1
Adverse effects
on the environment 4 A 1
on the general public 4 A 2
Algicide 1 A 2
Arsenic 5 D 5
Atropine, as antidote
in carbamate poisoning 6 B 3, 7 B 3
in organophosphate poisoning 6 B 2, 7 B 2
Avicide 1 A 2

Picture 7 – Index of subjects covered by modules

The first of two following *examples* illustrate how to design and customize a one-week training course for spray men in malaria control (*Group L*) operations. The second example shows how to design a course for spray men in agriculture and their supervisors (*Group M*). A third example illustrates the use of a roadmap as part of a Trainer's *checklist*.

The Trainer should assess the contents of the Resource Tool in the light of his experience, new knowledge and the training level at hand. Additional information might be necessary, as well as practical exercises taking into consideration the pesticide(s) and equipment used by the target group, e.g. available protective gear, checking, calibrating and maintaining equipment, mixing of pesticides, loading of equipment and spraying. *In addition, in any course programme, the Trainer may find that first aid treatment may have to be allowed more space to cover additional references from the CD or from other sources.*

Example 1: A 1-week training course for spray men in malaria control operations

The examples of the *Part I: Overview section* of the Resource Tool will assist the Trainer to design a course of appropriate length and to customize the contents to the particular group of trainees (target group) at hand. The Index of subjects covered by modules will help the Trainer in selecting appropriate sections under each relevant module.

Annex 1 of this User's Manual shows an *example* of a 1-week course curriculum to train spray men in malaria control operations (public health campaigns). Modules and sections have been selected based on the Overview section of the Resource Tool (Group L). The Trainer will decide the number of hours allocated for each module.

Annex 2 of this User's Manual is one of a number of possible programmes for the course contents shown in Annex 1. For each of the five days programme, there are theoretical and practical training sessions. The Trainer will decide the length of each session. A field visit with practical exercises has been included for hands-on training.

Example 2: A 2-week training course for supervisors of spray men in agriculture

As in the previous example, the *Overview section* of the Resource Tool will assist the Trainer to design a course of appropriate length and to customize the contents to the particular target group at hand. The Index of subjects covered by modules will help the Trainer in selecting appropriate sections under each relevant module.

Annex 3 of this User's Manual shows an *example* of a 2-weeks course curriculum to train supervisors of spray men in agriculture. Modules and sections have been selected based on the Overview section of the Resource Tool (Group M). The Trainer will decide the number of hours allocated for each module. The sections selected are at two training levels: Basic and Intermediate. In this *example*, the Trainer, therefore, has decided to run the course at the Basic level the first week, and at the Intermediate level the second week.
Annexes 4 and 5 of this User's Manual show the detailed course program for weeks 1 and 2, respectively.
Field visits and practical exercises have been included during both course weeks.

Example 3: A 1-week training course for spray men in agriculture

In Example 2, the training programme of the first week (see **Annex 4** of this User's Manual) was at Basic level (whereas the second week was held at Intermediate level). This design makes it possible to use the training programme for supervisors of spray men in agriculture also for the spray men themselves.

Trainer's checklist

Section 3 of Part I Overview contains a suggested *checklist* for a course (page 24 of the pdf version) to be completed before the start of the training programme. In addition to this checklist, the Trainer may wish to compile a "roadmap" to facilitate navigation between modules and sections during training sessions. **Annex 6** of this User's Manual is an *example* of such a roadmap to be used by a trainer during discussions on mode of action of pesticides, first aid and medical training of pesticide poisoning. The roadmap helps the trainer to identify and navigate between modules and sections when need arises.

How to Prepare a PowerPoint Presentation

The Template folder on the CD contains thirteen .jpg files. These can be used as backgrounds for PowerPoint presentations (users can paste a .jpg file into the .ppt slide master).

The archives folder also contains hundreds of .jpg images which can be pasted into .ppt slides to make custom presentations.

Explanations on Some of the Functionalities of the Resource Tool, and Problem Solving

Modules

Throughout the Modules, there are ***no images*** in Macromedia Flash mode**.** For images, use the PDF version or the resources identified in Appendix II (there are however ***no captions*** for these images).

How to Order Copies of the CD and the User's Manual

Copies of the CD-ROM and of this User's Manual can be ordered from the address identified in the Feed-back section below.

Feed-back

Thank you for using this resource tool. Your input and suggestions to the contents and presentations of the resource tool will help to improve future editions. A questionnaire is available on http://www.chem.unep.ch/pops/r_tool/RtoolQuestionnaire.doc. Please send the completed questionnaire, preferably in electronic format, to:

Agneta Sundén Bylehn
Email: asunden@chemicals.unep.ch
Senior Scientific Affairs Officer
UNEP Chemicals
15, Chemin des Anemones
CH-1219 Châtelaine, Geneva
Switzerland

ANNEX 1. Modules and sections for a 1-week course to train spray men in malaria control operations

Modules	Sections	Section titles	Number of hours allocated
1: **General considerations on pesticides, Classification and labelling, Regulatory control of pesticides, and International conventions**	A 1, 5, 8	• Use of pesticides • Technical product, active ingredient, formulation • Hazard and risk	5 hours
	B 1, 3	• Hazard classes • Importance of label	
2: **Absorption and effects of pesticides**	A 1, 2, 3, 4	• Routes of entry - Through the skin • Through the mouth • Through the lungs • Through broken skin	3 hours
	B 1, 2	• Acute and long-term effects • Accumulation in the body	
3: **Personal protection**	A 1, 2, 3, 4, 5	• Protection by hygiene – Objective of protection • Washing • Eating and drinking at work • Smoking at work • Chewing at work	8 hours
	B 1, 2, 3, 4, 5, 6, 7	• Protection of the body – Main part of the body • Head and neck • Lower legs and feet • Hands • Eyes • Avoid inhalation • Washing clothing and equipment	
	C 3, 6, 7	• Knapsack spraying • Dusting • Mixing pesticides	

Modules	Sections	Section titles	Number of hours allocated
4: **Protection of others**	A 1, 2, 3	• Adverse effects on the environment • Adverse effects on the general public • Specially sensitive areas and resources	10 hours
	B 1, 2	• Unintentional pesticide release or exposure – Sources • Environmental pathways and fate of pesticides	
	C 1, 2	• Integrated pest and vector management • Food Safety	
	D 2, 4	• Storage (general) • Security of storage	
	E 1, 4	• Timing of application to avoid movement of pesticides and exposure of animals and people • When a spill occurs	
	F 1, 6	• Disposal of containers • Disposal of obsolete pesticides	
5: **Chemical groups and modes of action of pesticides**	A 1	• Names of pesticides	2 hours
	B 1, 4(c) [depending on pesticide used]	• Pyrethroid compounds • Organophosphorus compounds • Organochlorine compounds	
6: **First aid treatment of pesticide poisoning**	A 1	• Signs and symptoms – General information	2 hours
	B 1	• Treatment – general principles	
	C 1, 2	• Local treatment of splashes of pesticides – In the eye • Ditto on the skin	

ANNEX 2. Example of a 1-week programme to train spray men in malaria control operations

Day	Session 1	Session 2	Break	Session 3	Session 4
1	PRESENTATIONS; INTRODUCTION, DISTRIBUTION OF HAND OUTS, ETC.	1A 1, 5, 8	LUNCH	1B 1, 3	5A 1 5B 1, 4(c)
2	2A 1, 2, 3, 4	2B 1,2	LUNCH	3A 1, 2, 3	3A 4, 5
3	3B 1, 2 3	3B 4, 5, 6, 7	LUNCH	FIELD VISIT AND PRACTICAL EXERCISES	
4	3C 3, 6, 7	4A 1, 2, 3 4B 1, 2	LUNCH	4 C 1, 2	4D 2, 4 4 E 1, 4
5	4 F 1, 6	6A 1 6B 1 6C 1, 2	LUNCH	COURSE EVALUATION, TRAINING CERTIFICATES, ETC.	

ANNEX 3. Modules and sections for a 2-weeks course to train supervisors of spray men in agriculture

Modules	Sections	Basic level	Intermediate level	Number of hours allocated
1: **General considerations on pesticides, Classification and labelling, Regulatory control of pesticides, and International conventions**	A 1-8	2	6	9
	B 1-3	1	2	
	C 1	1		
2: **Absorption and effects of pesticides**	A 1-4	4		4
	B 1-4	1	4	
3: **Personal protection**	A 1-5	5		12
	B 1-7	7		
	C 1,2, and 4-9(b)	5	3	
4: **Protection of others**	A 1-3	3	1	18
	B 1-2	1	1	
	C 1-2	2	1	
	D 1-6	3	3	
	E 1-5	5		
	F 1-6	4	2	
5: **Chemical groups and modes of action of pesticides**	A 1-3	1	2	9
	B 1-4		4	
	C 1-7		7	
	D 1-9		9	
6: **First aid treatment of pesticide poisoning**	A 1-19	1	18	7
	B 1-19		19	
	C 1-2	2		
8: **Administrative and scientific subjects**	A 2-3		2	1
	TOTAL ►	48	84	60

ANNEX 4. Example of a 1-week programme at Basic level to train supervisors and spray men in agriculture

Day	Session 1	Session 2	Break	Session 3	Session 4
1	PRESENTATIONS; INTRODUCTION, DISTRIBUTION OF HAND OUTS, ETC.	1 A 1, 6 1 B 3	LUNCH	1 C 1 2 A 1, 2	2 A 3, 4 2 B 1
2	3 A 1, 2, 3	3 A 4, 5 3 B 1	LUNCH	3 B 2, 3, 4	3 B 5, 6, 7
3	3 C 4, 5, 6	3 C 7, 8	LUNCH	FIELD VISIT AND PRACTICAL EXERCISES	
4	4 A 1, 2, 3	4 B 1 4 C 1, 2	LUNCH	4 D 1, 2, 5	4 E 1, 2
5	4 E 3, 4, 5	4 F 1, 2, 3, 4	LUNCH	5 A 1 6 A 1 6 C 1, 2	[COURSE EVALUATION, TRAINING CERTIFICATES, ETC.]

ANNEX 5. Example of a 1-week programme at Intermediate level to further train supervisors of spray men in agriculture

Day	Session 1	Session 2	Break	Session 3	Session 4
6	1 A 2, 3, 4, 5, 7, 8	1 B 1, 2 2 B 2, 3, 4	LUNCH	3 C 1, 2, 9 4 B 2	4 D 3, 4, 6 4 F 5, 6
7	5 A 2, 3 5 B 1, 2, 3, 4	5 C 1, 2, 3, 4	LUNCH	5 C 5, 6, 7 6 A 1, 2, 3, 4, 5, 6	5 D 1, 2, 3, 4 6 A 7, 8, 9, 10, 11, 12, 13
8	FIELD VISIT		LUNCH	5 D 5, 6, 7, 8, 9	6 A 14, 15, 16, 17, 18, 19
9	6 B 1, 2, 3, 4, 5, 6	6 B 7, 8, 9, 10, 11, 12	LUNCH	STUDY TOUR	
10	6 B 13, 14, 15, 16, 17, 18, 19 8 A 2, 3	COURSE EVALUATION, TRAINING CERTIFICATES, ETC.			

ANNEX 6. Modules and sections covering mode of action, first aid, and medical treatment of some pesticides – example of "roadmap"

Pesticides (individual or by chemical group)	Mode of action	First aid for pesticide poisoning	Medical treatment of pesticide poisoning
Training level▶	Intermediate	Intermediate	Advanced
2,4-D	5D3	6B13	7A14
Anticoagulant rodenticides		6B6	7A6
Arsenic salts			7A16
Calciferol derivatives	5C3	6B7	7A7
Carbamates	5B2	6B3	7A3
Chloralose	5C6	6B9	7A10
Chloropicrin	5D8	6B18	7A22
Diquat and paraquat	5D1	6B11	7A12
Fluoroacetate	5C4	6B8	7A8
Glyphosate	5D2	6B12	7A13
Metal phosphides	5C5		7A9
Metals and organometals	5D5	6B15	7A17, 18, 19
Methyl bromide*	5D7	6B17	7A21
Organochlorine compounds	5B3	6B4	7A4
Organophosphorus compounds	5B1	6B2	7A2
Pentachlorophenol and related compounds	5D4	6B14	7A15
Pyrethroids	5B4	6B5	7A5
Sulfuryl fluoride	5D9	6B19	7A23
Thallium	5C7	6B10	7A11
Thiocarbamates	5D6	6B16	7A20
Warfarin	5C1		
Warfarin derivatives	5C2		

*To be phased out under the Montreal Protocol on Substances that Deplete the Ozone Layer

ANNEX 7: Subject/Module Index

Absorption and effects of pesticides, see *Module 2*
Additional sources of information, see *Annex II*
Administrative work, see *Module 8*
Chemical groups and modes of action of pesticides, see *Module 5*
Classification and labelling, see *Module 1*
Course evaluation methodology, see *Module 9*
Documents/References/Resources, see *Module 10,* and *Annex II Links to other sites*
Evaluation, see *Module 9*
First aid for pesticide poisoning, see *Module 6*
Glossary, see *Annex I*
Handbook for health care workers, see *Annex II*
Hyperlinks to information sources, e.g. WHO, ILO, UNEP, FAO, UNIDO, UNITAR, OECD, UNECE (and some other sites and sources), see *Annex II Links to other sites*
Image archive, see *Annex III*
Index of subjects covered by modules, *see Part I, section 4*
International Code of Conduct on the Distribution and Use of Pesticides, see *Annex II*
International conventions, see *Module 1*
Integrated Pest Management, see *section 1A1, 4c*
Management of poisoning – A handbook for health care workers, see *Annex II*
Medical treatment of pesticide poisoning, see *Module 7*
Modes of action of pesticides, see *Module 5*
Mosquito nets, instructions for treatment and use, see *Annex II*
Personal protection, see *Module 3*
Pesticide poisoning – medical treatment, *see Module 7*
Pesticide poisoning – first aid, see *Module 6*
Pesticide training tool kit – A guide for community workers, see *Annex II*
Pesticides CD-ROM, see *Module 10*
Pictograms for pesticide labels, see *Annex III*
PowerPoint templates, see *Annex II*
Preventing health risks from the use of pesticides in agriculture, see *Annex II*
Protecting the environment, see *Module 4*
Protecting the general public, see *Module 4*
Regulatory control, see *Module 1*
Scientific subjects, see *Module 8*
WHO Recommended Classification by Hazard, see *Annex II*